MA 15300 College Algebra Section 01I — Summer 2025

Instructor Information

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Office Hours: MW 5:00 – 6:00, TR 10:00-11:00, or by appointment

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Class Information

Website: Course content will be on Brightspace (purdue.brightspace.com)

Prerequisites: MA 11100 with grade of B- or better, or placement by departmental exam.

Communication

Email will be the best way to reach me outside of class and when I am not holding office hours. To make sure your email reaches me, include in the subject line your full name and course. For example: Billy Pilgrim, MA 15300. University policy requires that you use your university email address to email me to protect your privacy. Please do not use your private email address, and please keep the topic about the class. For questions about assignment due dates check out Brightspace first.

Course Description & Objectives

The purpose of this course is to prepare you for calculus. (If you do not intend to take calculus, a better course to take would be either MA 140 or STAT 125. They have higher success rates.) In this course you will solve problems presented as real-world situations by creating and interpreting mathematical models which include linear, exponential, quadratic, power, polynomial and rational functions. Solutions to the problems are formulated, validated, and analyzed using mental, paper and pencil, algebraic, and technology-based techniques as appropriate. MA 15300 meets all eight outcomes (3.1 to 3.8) in *Area 3: Quantitative Reasoning* of the Indiana General Education Core. We will cover portions of Chapters 1-6 and Chapter 11 of the text. Course goals are listed on the General Course Information document. Learning outcomes are listed in the lessons provided on Brightspace in the Weekly folders for each section of the text. See the Flash Cards on Möbius for assessment questions aligned to each learning outcome.

Course Structure

Videos on Brightspace are best watched with pencil and paper in hand so you can work along on the video.

TIP: Keep a special section in your notes or a binder to collect any questions as you watch the videos and work on assignments. You will also be able to connect with other students in the class through our online asynchronous discussion forum called Piazza.

Textbook, Calculators, & Software

Textbook: Functions Modeling Change, 6th Edition, by Connally. **This is optional but recommended**. You can also use the 5th Edition or even the 3rd. We do NOT use WileyPLUS. You might find the text for cheap online (try Chegg, Amazon, eBay, or betterworldbooks.com)

Calculator: A graphing calculator is recommended for assignments and tests. The TI-84 Plus or TI-84 CE Plus are the tools of choice. Note: You can rent one at Walb Student Union 225 (260-481-6586). More information on renting can be found here: https://www.pfw.edu/student-government/services/rentals.

Since all quizzes and tests are online, these free alternatives are also possible: <u>Wabbit Emu</u>, <u>Desmos</u>, <u>Geogebra</u>
If you know of other free options, please share this info with me.

Online Homework: e-Homework, commercially called Möbius, is required for all your graded homework and is linked to your Brightspace course so that you are registered and can immediately access Möbius. The \$20.00 license fee has been added to your tuition statement by the Follett's Bookstore.

Grading

There are 720 possible points to earn in this course. Your course grade will be determined by the following components:

Total	720 pts
Final Exam	185 pts
Exam 2	150 pts
Exam 1	150 pts
Homework	150 pts
Participation	10 pts
Prerequisite Skills Quiz	75 pts

Α	90% – 100% (648 pts or more)
В	80% – 89% (576 pts. – 647 pts.)
С	70% – 79% (504 pts575 pts.)
D	60% – 69% (432 pts503 pts.)
F	< 60% (Below 432 pts.)

Prerequisite Skills Quiz: This quiz provides quick and early feedback to you on your proficiency with the skills needed for this course so you know if you have the skills needed, if you need to brush up, or if you need to take a refresher course. Study the eHW assignment *Math Background Needed for MA 15300* (and its worked out solutions). There are *eHW Flash Cards* to practice.

Participation: Post your self-introduction on Brightspace and submit the *Getting to Know You* survey, each worth 5 points. Some ways to earn +1 bonus toward your participation score: attach a photo to your self-introduction on Brightspace, post at least once to the Piazza Discussion Board in a way that supports others' learning (ask a question, answer another student's question, or positively contribute to the class community by sharing a tip), or <u>more</u>. You can also earn +1 bonus getting caught being awesome.

Online Homework: Past students have cited eHW as the key to their success. You have unlimited attempts until the due date, then the highest score is taken. The average score of all your best eHW scores (@ 20 pts each) is converted to a percentage and taken out of 150 points. Please read the section on eHW in the General Course Information for help with how to use eHW.

You are encouraged to complete the assignment multiple times (even after you have earned a perfect score). Research has shown that students who do this retain the material better for the exam.

Late eHW may be submitted, but with a 10% late penalty. All late eHW closes at 11:59 PM on Wednesday, June 25.

Hot eHW Award: If you earn 90% (18 / 20) or higher on the eHW assignments over the test material prior to taking the test, then you will the Hot eHW Award for that test, which comes with a +2 Test Bonus Point.

eHW Guarantee: The question bank is well scrubbed; however, if you do find that your answer is correct and the system tells you otherwise (due to mathematics, not text entry) and you are the first to report it to the Course Coordinator, John LaMaster, lamaster@pfw.edu, who will award you double points for that question.

IMPORTANT! Always enter Möbius through Brightspace! Otherwise the marriage between Möbius and Brightspace will separate and they will stop communicating with each other.

Exams: There will be two Chapter Exams, worth 150 points each.

The online final exam will open Thursday, June 26, @ 12:00am and will close Saturday, June 28, @ 11:59pm.

The final exam is worth 185 points, and will be comprehensive (covering all material previously tested).

To help accommodate any possible Internet outages, you will have 3 attempts for each exam, and you have 180 minutes to complete each exam, taking the highest score. Please contact me as soon as possible if you have any issues that prevent you from completing your work.

Keep track of these dates in your personal calendar:

Test 1 (Sections 1.1-1.5, 2.1-2.2, 2.5-2.6, 4.1-4.2): available Sat., May 31 to 11:59 PM, Wed., June 4 Test 2 (Sections 4.3-4.5, 5.1-5.3, 2.4, 6.1-6.2, 3.1-3.2): available Sat., June 14 - 11:59 PM, Wed., June 18 Final Exam (Sections 11.1-11.5 and all prior content): available Thurs., June 26 - 11:59 PM, Sat. June 28

Student Support

I want you to be successful. Please reach out if you need help. Below is a directory of resources for specific issues. If technical difficulties affect your ability to complete assignments, please notify me as soon as possible.

For help with:	Contact:	Contact Information:			
General Needs	Academic Services, Technology Services, Health and Wellness, and Support from Administrative Offices	See the Student Support Services Website			
Account/password/Brightspace Support	Information & Technology Services (ITS) Help Desk	Call: 260-481-6030 Email: helpdesk@pfw.edu See the ITS Website			
Troubleshooting eHW	eHW Technical Support	Email: ehwtechsup- port@pfw.edu			
Graphing Calculator Rental	Student Government	Walb 225 or call: 260-481-6586 See the Calculator Rental Website			
Using eHW	Check out the resource General Course Information in Brightspace first. Then see the Möbius Support Website for help.				
Tutoring	Online HERE and Face to Face tutoring in KT G19. I will put a schedule in Brightspace once it is available.				
Short-term Counseling (Free)	Campus Health Clinic	Call the 24 hour Hotline: 800-342-5653 See their Website.			
Withdrawing from the class	Office of Student Conduct and Care	Call: 260-481-0404, Email: withdraw@pfw.edu See the Student Conduct and Care Website.			
How to succeed in MA 15400	Students enrolled in a previous MA 15400 semester	See the <u>tips they wrote</u> specifically to you!			
If you don't know where else to turn for resources, then contact	the CARE team	See their <u>Website</u> or call: 260-481-6601			
Accommodations for students with disabilities (See below*)	Disability Access Center (DAC)	Walb 113, 260-481-6658, See their <u>Website</u> .			

Students with Disabilities

If you have a disability and need assistance, special arrangements can be made to accommodate most needs. Contact the Director of the Disability Access Center (Walb Union, Room 113, telephone number 481-6658) as soon as possible to work out the details. Once the Director has provided you with a letter attesting to your needs for modification, bring the letter to me. For more information, please visit the Web site for <u>Disability Access Center (DAC)</u> and refer to the <u>DAC Student Handbook</u>.

Overall Course Schedule

To keep track of deadlines in this course you can use the calendar on Brightspace or use the Brightspace Pulse App to receive notifications. Directions on acquiring Brightspace Pulse App are in the checklist in the Start Here module.

The tentative course calendar on the next page provides more details about deadlines and may be helpful to see the big picture. The deadlines are also on the Brightspace Calendar and on this handy, clickable <u>Checklist</u>. If for any reason you are unable to complete a test during the specified dates for reasons beyond your control, please reach out to me for help.

Overall Course Schedule

The Schedule and assignments are subject to change. Any changes will be posted in Brightspace.

Topic	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
Week 1 (May. 19-24): Sections 1.1-1.5, 2.1-2.2	May 19	May 20	May 21	May 22	May 23	May 24
Linear Functions and the Average Rate of			Self-Intro on Brightspace due		eHW on Math Background due	
Change			Getting to Know You Survey due		Prerequisite Skills Quiz closes	
			Syllabus Scavenger Hunt due			
Week 2 (May 27-31): Sections 2.5-2.6, 4.1-4.2	May 26	May 27	May 28	May 29	May 30	May 31
Function Properties and Exponential Functions	Memorial Day		eHW0: General Course Info due		eHW03: 2.5-2.6 due	Test 1 opens
			eHW01: Chapter 1 due		eHW04: 4.1-4.2 due	
M1-2/12 7\-C+ 42.45 5.45.2	June 2	June 3	eHW02: 2.1-2.2 due June 4	June 5	June 6	June 7
Week 3 (June 2 - 7): Sections 4.3 4.5, 5.1-5.3	Julie 2	Julie 3	Julie 4	Julie 3	Julie 6	Julie /
Logarithmic Functions						
			Test 1 closes		eHW05: 4.3-4.5 due	
					eHW06: 5.1-5.3 due	
Week 4 (June 9-14): 2.4,6.1-6.2, 3.1-3.2	June 9	June 10	June 11	June 12	June 13	June 14
Transformations of Functions (Reflections,					eHW07: 2.4, 6.1, 6.2 due	Test 2 opens
Vertical Stretches, and Vertical Compressions)					eHW08: 3.1-3.2 due	
and Quadratic Functions						
	1 16	l 17	L 40	1 10	L 20	I 24
Week 5 (June 16-21): Sections 11.1-11.3	June 16	June 17	June 18	June 19	June 20	June 21
Power Functions and Polynomial Functions						
			Test 2 closes		eHW09: 11.1 due	
					eHW10: 11.2-11.3 due	
Week 6 (June 23-28): Section 11.4-11.5	June 23	June 24	June 25	June 26	June 27	June 28
Rational Functions and Final Exam			eHW11: 11.4 due	Final Exam		Final Exam closes
			eHW12: 11.5 due	opens		
	1		All late eHW closes			

Artificial Intelligence (AI) and eHW (Möbius)

The use of AI is recommended in order to help you learn the content as opposed to just getting an answer to earn points. Use AI and eHW for systematic, regular practice with a targeted focus, the way professionals develop mastery. In Brightspace, click on Content \rightarrow e-HW (Möbius) \rightarrow How to Use eHW and Other Learning Aids to be Successful for tips specific to our class. There will often be a paywall for Wolfram Alpha, Mathway, or other computer algebra systems to explain the steps to the solution process. Do not pay. Microsoft Copilot with Data Protection, available here, is free to students. Sign in with your PFW account credentials. Alternatively, check out ChatGPT, Gemini, and others.

Advice on Succeeding in MA 15300

Here is some timeless advice to take to heart so that you do not become overwhelmed: There's no substitute for daily preparation. In other words, work on this course every day, rather than saving it for the last minute before the deadline. Do not confuse the "due date" with the "do date".



Be like the rhinoceros!

Wake up each morning and CHARGE straight ahead to accomplish your goals.

No obstacles get in the way of a

3 ton snorting rhinoceros charging at full speed!

If you find yourself overwhelmed or in the wrong class, please make sure you officially process your withdrawal rather than simply stop attending. The last day to officially withdraw is **Friday**, **June 13**. To officially process a withdrawal, log in to **go.pfw.edu** and, on the Home Page on the first card titled **Student To-do List**, select **Student Common Dashboard** (the fourth item in the list). Then click on **Withdraw Form** (after add/drop, until deadline) and submit the form. This would only put a grade of W on your record instead of a grade of F. A grade of W does not affect your GPA. Future employers will not view a grade of W as a mar on your record, but, instead, as a strategic recalibration.

Thank you for reading this syllabus.

One of your first assignments on Möbius is a *Syllabus Scavenger Hunt*. If you score 100% on the *Syllabus Scavenger Hunt* you will receive a +1 Bonus to your eHW Category. Remember you have unlimited attempts on your Möbius e-homework assignments before the deadline and the highest score is kept.

